Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-34 (cancelled)

35. (New) An air conditioning system for heating and/or cooling a passenger compartment of a motor vehicle, comprising a compressor, the compressor powering at least two air conditioning circuits at the same time.

36. (New) The air conditioning system of claim 35, wherein the at least two air conditioning circuits include a first circuit for cooling supply air for the passenger compartment and a second circuit for heating supply air for the passenger compartment

37. (New) The air conditioning system of claim 36, wherein the first circuit can be used for cooling at the same time the second circuit is used for heating.

38. (New) The air conditioning system of claim 35, wherein the compressor includes a high-pressure side and a low pressure side, the at least two air conditioning circuits located downstream of the high pressure side, and wherein a branch point is provided between the high pressure side and the at least two air conditioning circuits.

39. (New) The air conditioning system of claim 36, wherein the compressor includes a high-pressure side and a low pressure side, the first and second circuits located downstream of the high pressure side, and wherein a branch point is provided between the high pressure side and the first and second circuits, and wherein an expansion valve is located downstream of the branch point in the second circuit.

40. (New) The air conditioning system, of claim 39, wherein a check valve is located downstream of the branch point in the first circuit.

41. (New) The air conditioning system of claim 36, wherein the compressor includes a high-pressure side and a low pressure side, the at least two air conditioning circuits located downstream of the high pressure side, and wherein a branch point is provided between the high pressure side and the first and second circuits, wherein a check valve is located downstream of the branch point in the first circuit.

42. (New) An air conditioning system for heating and/or cooling a passenger compartment of a motor vehicle comprising a compressor, the compressor having a low pressure side and a high pressure side, a valve device located downstream of the compressor on the high-pressure side, the valve device splitting a high-pressure refrigerant flow from the compressor into two streams.

43. (New) The air conditioning system of claim 42, wherein the two streams comprise a first refrigerant flow and a second refrigerant flow, and wherein the first refrigerant flow is used for cooling supply air for the passenger compartment and, at the same time, the second refrigerant flow is used for heating supply air for the passenger compartment.

44. (New) The air conditioning system of claim 43, wherein the first refrigerant flow is coupled to a refrigeration circuit and the second refrigerant flow is coupled to a heating circuit, and wherein, on the high-pressure side, the second refrigerant flow uses the high refrigerant temperature resulting from compression in the compressor to heat the supply air of the passenger compartment.

45. (New) The air conditioning system of claim 44, wherein the high temperature of the second refrigerent flow is used to heat a cooling water circuit via a heat exchanger.

46. (New) The air conditioning system of claim 45, wherein the cooling water circuit heats the supply air of the passenger compartment via another heat exchanger.

47. (New) The air conditioning system of claim 45, wherein a throttling device or an expansion valve is located downstream of the heat exchanger.

48. (New) The air conditioning system of claim 47, wherein a check valve is located

downstream of the throttling device or the expansion valve; the check valve preventing refrigerant from flowing from the refrigeration circuit into the heating circuit.

49. (New) The air conditioning system of claim 48, wherein downstream of the check valve, the heating circuit and the refrigeration circuit are coupled to the low pressure side of the compressor.

50. (New) The air conditioning system of claim 44, wherein the high temperature of the second refrigerent flow is used for heating the supply air of the passenger compartment via a heat exchanger.

51. (New) The air conditioning system of claim 50, wherein a throttling device or an expansion valve is located downstream of the heat exchanger.

52. (New) The air conditioning system of claim 51, wherein another heat exchanger that reheats the refrigerant with cooling water is located downstream of the throttling device or the expansion valve.

53. (New) The air conditioning system of claim 52, wherein a check valve is located downstream of the another heat exchanger; the check valve preventing refrigerant from flowing from the refrigeration circuit into the heating circuit.

54. (New) The air conditioning system of claim 53, wherein downstream of the check valve, the heating circuit and the refrigeration circuit are coupled to the low pressure side of the compressor.

55. (New) The air conditioning system of claim 44, wherein the heating circuit prevents window fogging.

56. (New) The air conditioning system of claim 45 wherein the cooling water circuit comprises a bypass added in a water circuit of a cooling water circuit of an internal combustion engine, the bypass being able to be opened and closed.

57. (New) The air conditioning system of claim 51, wherein the another heat exchanger reheats the refrigerant with heat from ambient air, or heat from engine parts or engine block parts, or heat from the exhaust tract.

58. (New) The air conditioning system of claim 52, wherein a volume flow of the cooling water is controllable by a thermostatic control valve in order to control the heat flow.

59. (New) The air conditioning system of claim 49, wherein the compressor is a variable-stroke compressor including a compression chamber, and , upon turning on the air conditioning system, the supply to the compression chamber in the variable-stroke compressor is essentially shut off in order to remove liquid refrigerant from the compressor.

60. (New) The air conditioning system of claim 49, wherein when turning on the air conditioning system to cool the passenger compartment, the cooling water circuit is decoupled from a colder, engine cooling water circuit, at least until substantially no liquid refrigerant occurs on the high-pressure side of the compressor.

61. (New) The air conditioning system of claim 60, wherein the cooling water circuit is opened to the engine cooling water circuit if, after the heat is transferred to the supply air of the passenger compartment, the temperature of the cooling water circuit is lower than the temperature of the engine cooling water circuit.

62. (New) The air conditioning system of claim 49, wherein when less heat is needed to heat the passenger compartment, the second refrigerent flow is correspondingly reduced.

63. (New) The air conditioning system of claim 49, wherein when engine cooling water in an engine cooling water circuit is warm and the passenger compartment is to be further cooled, the circulation of the cooling water circuit is shut off so that no additional heat is input into the system.

64. (New) The air conditioning system of claim 59, wherein when the engine is started cold and the engine cooling water is to be heated while refraining from heating the passenger compartment, the cooling water circuit is opened to the engine cooling water circuit.

65. (New) The air conditioning system of claim 54, wherein when turning on the air conditioning system to cool the passenger compartment, the supply to the compression chamber in a variable-stroke compressor is essentially shut off in order to remove liquid refrigerant from the compressor.

66. (New) The air conditioning system of claim 54, wherein heat input after throttling in the heating circuit is reduced if the passenger compartment is to be cooled when the engine cooling water is warm.

67. (New) The air conditioning system of claim 36, wherein waste heat of hot gas is used for heating.

68. (New) The air conditioning system of claim 42, wherein gases on the high pressure side reach 120 C during operation of the compressor.

69. (New) The air conditioning system of claim 42, wherein the refrigerant is CO2.